Maryland Historical Trust

Maryland Inventory of Historic Properties number: WO-488

Name: MD 374 over Pocomoke River

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended __X____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: Concurrence in 2000 that it is not eligible.

Reviewer, OPS: _Anne E. Bruder_____ Date: __3 April 2001____

Reviewer, NR Program: __Peter E. Kurtze_____ Date: __3 April 2001____

Maryland Inventory of Historic Properties MHT Number WO-488
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

SHA No. 23017 **Bridge name** MD 374 over Pocomoke River

Location:
Street/Road Name and Number: MD 374 (Libertytown and Powellville Road)

City/Town: Libertytown **Vicinity** X

County: Worcester

Ownership: X State ____County _____Municipal _____Other

This bridge projects over: ___Road ___Railway _X Water ___Land

Is the bridge located within a designated district: ___yes _X_ no

___NR listed district ___NR determined eligible district
___locally designated ____ other
Name of District: _____

Bridge Type:

_X Timber Bridge
_X__Beam Bridge ___Truss-Covered ___Trestle
___ Timber-and-Concrete

___Stone Arch

___Metal Truss Bridge

___Movable Bridge
__Swing __Bascule Single Leaf __Bascule Multiple Leaf
__Vertical Lift __Retractile ___Pontoon

___Metal Girder
___Rolled Girder ___Rolled Girder Concrete Encased
___Plate Girder ___Plate Girder Concrete Encased

____Metal Suspension

___Metal Arch

___Metal Cantilever

___Concrete
___Concrete Arch ___Concrete Slab ___Concrete Beam
___Rigid Frame

___Other Type Name _____

Description:

Describe Setting:

Bridge 23017 carries MD 374 over the Pocomoke River in Worcester County, Maryland. MD 374 generally runs east-west direction at this location; the Pocomoke River flows north-south. The area immediately adjacent to the bridge is not heavily developed. The bridge is surrounded by wetlands and farms.

Describe Superstructure and Substructure

Bridge 23017 is a 120-foot, six span composite timber and concrete structure carrying MD 374 over the Pocomoke River. The bridge is not posted. It is supported on two timber abutments and six bents constructed from six timber piles with timber caps.

Each timber bent is made up of six timber piles with cross support beams. Each bent consists of six 14" +/- diameter piles. The piles are spaced approximately 5'-6" from each other. The bracing is 3" x 10" on intermediate bents. The timber cap is 12" x 14" x 16" and is attached to each pile with 2 1" x 2'-8" giant grip drive dowels. (A round peg-like short connecting piece fitting between the cap and the pile) Between the pile and the deck is a 16 oz copper plate.

Currently the timber pile bents are in a deteriorated state. Pile no. 1 has an area of 1' x 2' high by 5" deep. Bent No 2, pile no. 4 was penetrated 4 " which indicated that there is a significant brown rot and effective cross section loss. This pile is very similar to the deteriorated piles at bent no. 1 pile no. 6, which has deterioration at the waterline with 5" penetration. At bent no. 3, pile no. 4 there is a split in the south side of the pile at the bent cap and extends 3' down at an angle. At bent no. 4 pile nos. 1 and 3 have 2" of penetration while at bent no. 5, piles no. 1 and 3 have hollow soundings throughout. The deterioration is caused by the substructure's 52 years in tidal conditions with little conservation.

The parapets are not the 13-to-1 section standardized in 1928. This bridge has seventeen 3'-2" x 10" posts crossed by two 6'-3" concrete cross sections.

Discuss Major Alterations:

The replacement and splicing of cross bracing was completed in 1995. A March 1998 memorandum in the bridge inspection file describes the completed installation of bent cap supports and pile jacket supports. The work was completed by March of 1998.

History:
When Built: 1941-42
This date is: Actual ___X___ Estimated_____
Source of date: Plaque_____ Design plans_____ County bridge files/inspection form _X_

Why Built: The old Libertytown and Powellville Road (MD 374) needed a structure with increased load capacity. It is unclear what the previous structure was.
Who Built: State Roads Commission
Why Altered: N/A
Was this bridge built as part of an organized bridge building campaign:
Yes, the bridge was built during the upsurge of construction of bridges during the Second World War.

Surveyor Analysis:
This bridge may have NR significance for association with:
___A Events __B Person
___C Engineering/Architectural

Bridge 23017 is not eligible for the National Register of Historic Places.

Was this bridge constructed in response to significant events in Maryland or local history:

The need to increase load capability in rural areas became more important during the Second World War. By virtue of the Act of Congress approved November 19, 1941 entitled "An Act to Supplement the Federal-Aid Road Act approved July 16,1916 as amended and supplemented to authorize appropriations during the National Emergency declared by the President on May 1941, for the immediate construction of roads urgently needed for the National Defense and for other purposes," the State Roads Commission embarked upon an unprecedented construction of roads and bridges. Projects that were in the preliminary planning stages could be bumped up for earlier construction under this new regulation, while other projects where halted. Although construction continued during the war, large-scale highway projects were shelved unless determined vital to the economic or defense needs of the nation.

It was important during this time to design projects that eliminated the use of critical materials. Timber or reinforced concrete construction was used in many places where structural steel would ordinarily have been used. In the case of reinforced concrete construction, the members were proportioned to keep the amount of reinforcing steel to a minimum. Bridge 23017 has very little metal. There are bolts between the piles and the deck and reinforcing bolts within the deck and parapet.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

Although built during the Second World War this bridge did not greatly effect the area surrounding it. The structure did not increase settlement or industry.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?

No this bridge is not located in an area which eligible for historic designation.

Is the bridge a significant example of its type?

No, this structure is not a significant example of a timber bridge.

Does the bridge retain integrity of the important elements described in the Context Addendum?

The concrete and timber deck combination is considered a primary character defining element. The concrete surface has longitudinal, map and transverse cracking. There is light to moderate scaling in the mainline. There is some surface spalling at both abutments. The overall rating on this element is satisfactory.

The timber piles and bents are considered primary character defining elements. Bent cap supports and pile jacket supports were added in 1998.

The concrete parapets used on Bridge 23017 are considered primary character defining elements. Currently the balustrades are in good condition. The posts have diagonal cracks with minor rebar exposures.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why?

No, this structure is not a significant example of the work of the State Roads Commission. Although it represents an effective use of wartime construction restrictions no new techniques were created to achieve this goal. In addition the bridge did not significantly change the nature of the region which it served.

Should this bridge be given further study before significance analysis is made and why?

No this structure should not be given further study.

WO-488

Bibliography:

Spero, P.A.C. & Company, and Louis Berger & Associates. Historic Bridges in Maryland: Historic Bridge Context, September 1994.

State Roads Commission Report 1941-1942.

Surveyor:

Name: Stacie Yvonne Webb **Date:** July 26, 1995
Organization: State Highway Admin. **Telephone:** (410)545-8559
Address: 707 North Calvert Street, Baltimore, MD, 21203
Revised by P.A.C. Spero & Company, July 1998

Maryland Historic Highway Bridges
Bridge Type Composite Timber & Concrete
MHT# WO-488
Map K-18, Assateaque S.P.
County Worcester
Bridge # and name 23017/MD 374 over Pocomoke Rive

1. WO-488

2. MD 374 over Pokomoke River

3. Worchester Co. MD

4. 3/98

5 Marris German, WMA

6. MD SHPO

7. New block & tribeam Attach. Northwest corner;
   all 4 corners - same.

8. 1 of 5

1. WO-488

2 MD 374 over Pokomoke River

3 Worchester Co, MD

4 3/98

5. Marris German, WMA

6 MD SHPO

7. Elevation looking upstream

8. 2 of 5

1. WO-488

2 MD 374 over Pokomoke River

3. Worchester Co, MD

4 3/98

5. Marris German, WMA

6. MD SHPO

7 Elevation looking downstream

8. 3 of 5

1. WO-488

2 MD 374 over Pokomoke River

3. Worchester Co, MD

4. 3/98

5. Marris German, WMA

6. MD SHPO

7. Looking West

8. 4 of 5


Maryland
History
POCOMOKE
SCENIC
RIVER

1. WO-488

2. MD 374 over Pokomoke River

3. Worchester Co MD

4/ 3/98

5 Marris German, WMA

6. MD SHPO

7. Looking East

8. 5 of 5

INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: MD374 (SHA Bridge #23017) Libertytown & Powellville Road, Libertytown, Worcester County Survey Number: WO-488

Project: Bridge Replacement Agency: SHA

Site visit by MHT Staff: X no ___ yes Name _____ Date _____

Eligibility recommended _____ Eligibility **not** recommended X

Criteria: ___A ___B X C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

Justification for decision: (Use continuation sheet if necessary and attach map)

Bridge No. 23017 carries MD ~~347~~ 374 over the Pocomoke River in Worcester County. It is a six-span, two lane composite timber bridge, constructed in 1941-42, which was determined to be ineligible for listing by the Interagency Historic Bridge Committee in 1995 because the timber pile bents are in a deteriorated state, and 80% require replacement. Replacements and splicing of cross bracing evidently occurred at some time in the past, which has further undermined the historic integrity of the structure. The Trust concurs with SHA and the Interagency Committee regarding the bridge's integrity and thus the bridge is not eligible for inclusion in the National Register under Criterion C – engineering. No information was provided which would indicate that the Bridge could meet either Criteria A or B, and thus it is not eligible under either.

Documentation on the property/district is presented in: Project Review and Compliance Files

Prepared by: Rita M. Suffness, SHA Architectural Historian January 10, 2000

Anne Bruder — February 16, 2000
Reviewer, Office of Preservation Services — Date

NR program concurrence: X yes ___ no ___ not applicable

[signature] — 2/23/00
Reviewer, NR program — Date

Survey No. WO-488

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

__X__ Eastern Shore	(all Eastern Shore counties, and Cecil)
_____ Western Shore	(Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
_____ Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
_____ Western Maryland	(Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

_____ Paleo-Indian	10000-7500 B.C.
_____ Early Archaic	7500-6000 B.C.
_____ Middle Archaic	6000-4000 B.C.
_____ Late Archaic	4000-2000 B.C.
_____ Early Woodland	2000-500 B.C.
_____ Middle Woodland	500 B.C. - A.D. 900
_____ Late Woodland/Archaic	A.D. 900-1600
_____ Contact and Settlement	A.D. 1570-1750
_____ Rural Agrarian Intensification	A.D. 1680-1815
_____ Agricultural-Industrial Transition	A.D. 1815-1870
_____ Industrial/Urban Dominance	A.D. 1870-1930
__X__ Modern Period	A.D. 1930-Present
_____ Unknown Period (___ prehistoric ___ historic)	

III. Prehistoric Period Themes:

_____ Subsistence
_____ Settlement

_____ Political
_____ Demographic
_____ Religion
_____ Technology
_____ Environmental Adaptation

IV. Historic Period Themes:

_____ Agriculture
_____ Architecture, Landscape Architecture, and Community Planning
_____ Economic (Commercial and Industrial)
_____ Government/Law
_____ Military
_____ Religion
_____ Social/Educational/Cultural
___X_ Transportation

V. Resource Type:

Category: Structure
Historic Environment: Rural
Historic Function(s) and Use(s): Transportation-related
Known Design Source: State Roads Commission

Attachment 3

Maryland Inventory of Historic Properties MHT Number WO-488
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

SHA No. 23017 **Bridge name** MD 374 over Pocomoke River

Location:
Street/Road Name and Number: MD 374 (Libertytown and Powellville Road)

City/Town: Libertytown **Vicinity** X

County: Worcester

Ownership: X State ___County ___Municipal ___Other

This bridge projects over: ___Road ___Railway X Water ___Land

Is the bridge located within a designated district: ___yes X no

___NR listed district ___NR determined eligible district
___locally designated ___ other
Name of District: _____

Bridge Type:

X Timber Bridge
X Beam Bridge ___Truss-Covered ___Trestle
___ Timber-and-Concrete

___Stone Arch

___Metal Truss Bridge

___Movable Bridge
__Swing __Bascule Single Leaf __Bascule Multiple Leaf
__Vertical Lift __Retractile ___Pontoon

___Metal Girder
___Rolled Girder ___Rolled Girder Concrete Encased
___Plate Girder ___Plate Girder Concrete Encased

___Metal Suspension

___Metal Arch

___Metal Cantilever

___Concrete
___Concrete Arch ___Concrete Slab ___Concrete Beam
___Rigid Frame

___Other Type Name _____

Description:

Describe Setting:

Bridge 23017 carries MD 374 over the Pocomoke River in Worcester County, Maryland. MD 374 generally runs east-west direction at this location; the Pocomoke River flows north-south. The area immediately adjacent to the bridge is not heavily developed. The bridge is surrounded by wetlands and farms.

Describe Superstructure and Substructure

Bridge 23017 is a 120-foot, six span composite timber and concrete structure carrying MD 374 over the Pocomoke River. The bridge is not posted. It is supported on two timber abutments and six bents constructed from six timber piles with timber caps.

Each timber bent is made up of six timber piles with cross support beams. Each bent consists of six 14" +/- diameter piles. The piles are spaced approximately 5'-6" from each other. The bracing is 3" x 10" on intermediate bents. The timber cap is 12" x 14" x 16" and is attached to each pile with 2 1" x 2'-8" giant grip drive dowels. (A round peg-like short connecting piece fitting between the cap and the pile) Between the pile and the deck is a 16 oz copper plate.

Currently the timber pile bents are in a deteriorated state. Pile no. 1 has an area of 1' x 2' high by 5" deep. Bent No 2, pile no. 4 was penetrated 4 " which indicated that there is a significant brown rot and effective cross section loss. This pile is very similar to the deteriorated piles at bent no. 1 pile no. 6, which has deterioration at the waterline with 5" penetration. At bent no. 3, pile no. 4 there is a split in the south side of the pile at the bent cap and extends 3' down at an angle. At bent no. 4 pile nos. 1 and 3 have 2" of penetration while at bent no. 5, piles no. 1 and 3 have hollow soundings throughout. The deterioration is caused by the substructure's 52 years in tidal conditions with little conservation.

The parapets are not the 13-to-1 section standardized in 1928. This bridge has seventeen 3'-2" x 10" posts crossed by two 6'-3" concrete cross sections.

Discuss Major Alterations:

The replacement and splicing of cross bracing was completed in 1995. A March 1998 memorandum in the bridge inspection file describes the completed installation of bent cap supports and pile jacket supports. The work was completed by March of 1998.

History:
When Built: 1941-42
This date is: Actual ___X___ Estimated_____
Source of date: Plaque_____ Design plans_____ County bridge files/inspection form _X_

Why Built: The old Libertytown and Powellville Road (MD 374) needed a structure with increased load capacity. It is unclear what the previous structure was.
Who Built: State Roads Commission
Why Altered: N/A
Was this bridge built as part of an organized bridge building campaign:
Yes, the bridge was built during the upsurge of construction of bridges during the Second World War.

Surveyor Analysis:
This bridge may have NR significance for association with:
___A Events __B Person
___C Engineering/Architectural

Bridge 23017 is not eligible for the National Register of Historic Places.

Was this bridge constructed in response to significant events in Maryland or local history:

The need to increase load capability in rural areas became more important during the Second World War. By virtue of the Act of Congress approved November 19, 1941 entitled "An Act to Supplement the Federal-Aid Road Act approved July 16,1916 as amended and supplemented to authorize appropriations during the National Emergency declared by the President on May 1941, for the immediate construction of roads urgently needed for the National Defense and for other purposes," the State Roads Commission embarked upon an unprecedented construction of roads and bridges. Projects that were in the preliminary planning stages could be bumped up for earlier construction under this new regulation, while other projects where halted. Although construction continued during the war, large-scale highway projects were shelved unless determined vital to the economic or defense needs of the nation.

It was important during this time to design projects that eliminated the use of critical materials. Timber or reinforced concrete construction was used in many places where structural steel would ordinarily have been used. In the case of reinforced concrete construction, the members were proportioned to keep the amount of reinforcing steel to a minimum. Bridge 23017 has very little metal. There are bolts between the piles and the deck and reinforcing bolts within the deck and parapet.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

Although built during the Second World War this bridge did not greatly effect the area surrounding it. The structure did not increase settlement or industry.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?

No this bridge is not located in an area which eligible for historic designation.

Is the bridge a significant example of its type?

No, this structure is not a significant example of a timber bridge.

Does the bridge retain integrity of the important elements described in the Context Addendum?

The concrete and timber deck combination is considered a primary character defining element. The concrete surface has longitudinal, map and transverse cracking. There is light to moderate scaling in the mainline. There is some surface spalling at both abutments. The overall rating on this element is satisfactory.

The timber piles and bents are considered primary character defining elements. Bent cap supports and pile jacket supports were added in 1998.

The concrete parapets used on Bridge 23017 are considered primary character defining elements. Currently the balustrades are in good condition. The posts have diagonal cracks with minor rebar exposures.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why?

No, this structure is not a significant example of the work of the State Roads Commission. Although it represents an effective use of wartime construction restrictions no new techniques were created to achieve this goal. In addition the bridge did not significantly change the nature of the region which it served.

Should this bridge be given further study before significance analysis is made and why?

No this structure should not be given further study.

WO-488

Bibliography:

Spero, P.A.C. & Company, and Louis Berger & Associates. Historic Bridges in Maryland: Historic Bridge Context, September 1994.

State Roads Commission Report 1941-1942.

Surveyor:
Name: Stacie Yvonne Webb **Date:** July 26, 1995
Organization: State Highway Admin. **Telephone:** (410)545-8559
Address: 707 North Calvert Street, Baltimore, MD, 21203
Revised by P.A.C. Spero & Company, July 1998

Maryland Historic Highway Bridges
Bridge Type Composite Timber & Concrete
MHT# WO-488
Map K-18, Assateague S.P.
County Worcester
Bridge # and name 23017/MD 374 over Pocomoke Rive

WO-488

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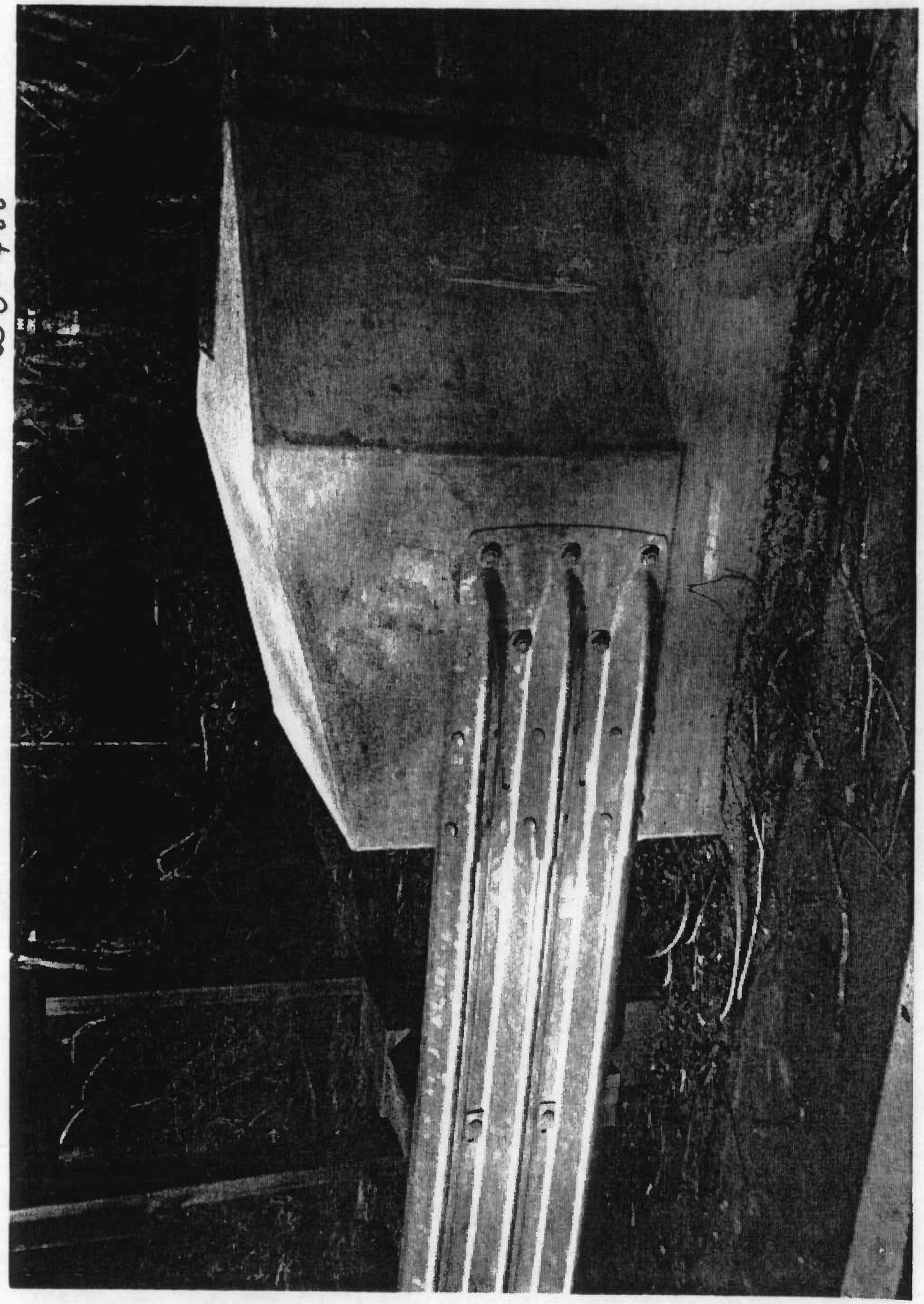

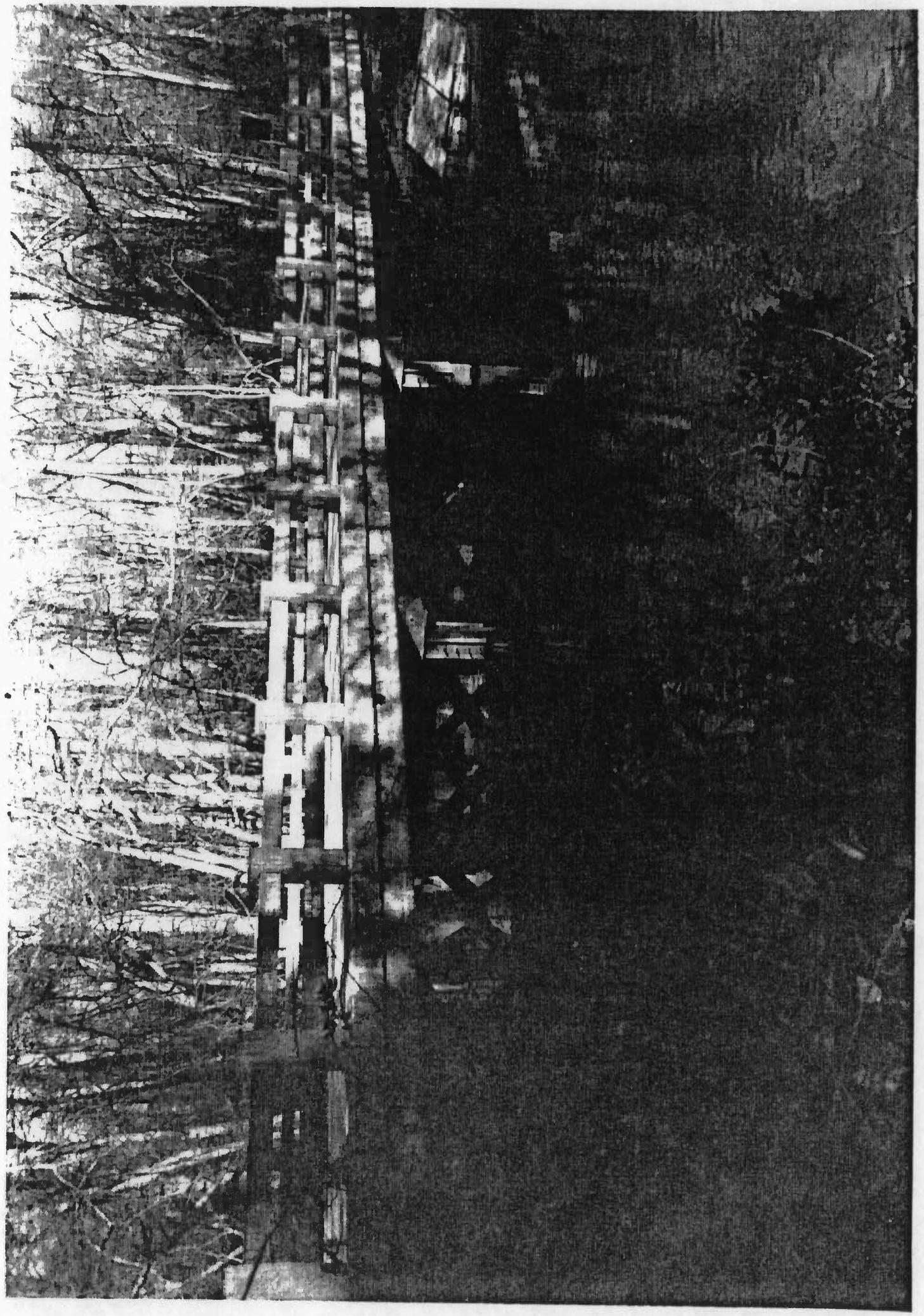

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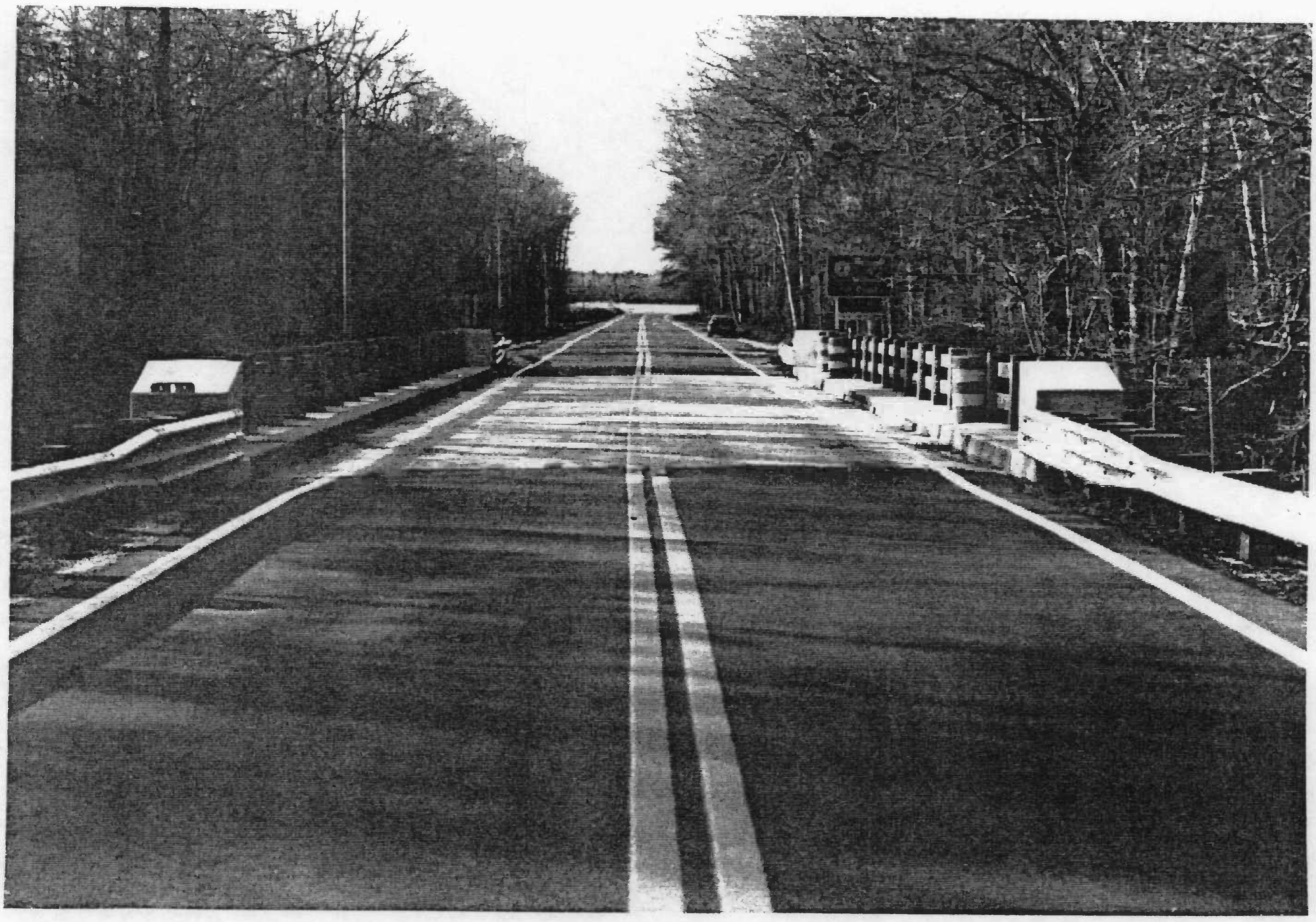

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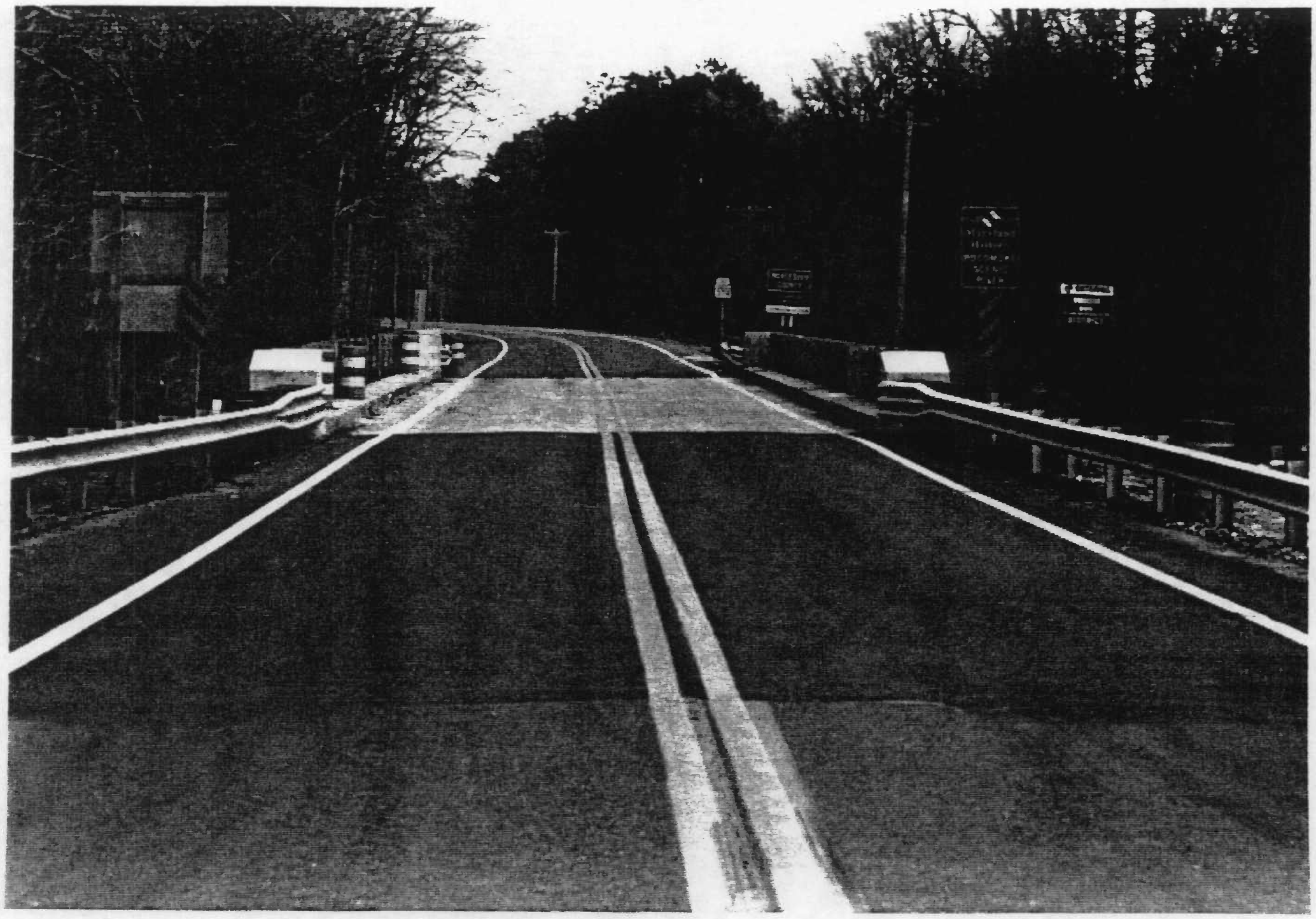

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INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Bridge No. 23017 Survey Number: WO-488

Project: Repair Br. No. 23017 Agency: SHA

Site visit by MHT Staff: X no ___ yes Name _____ Date _____

Eligibility recommended _____ Eligibility **not** recommended X

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

Justification for decision: (Use continuation sheet if necessary and attach map)

Based on the available information, Bridge No. 23017, which carries MD 347 over the Pocomoke River in Worcester County, does not meet the Maryland Register/National Register Criteria for listing. The six span timber bridge was built in 1941-42 and has concrete parapets. It is ineligible due to its lack of integrity. The substructure is in a state of severe deterioration. Thus the bridge is unlikely to be eligible under Criterion C as a representative example of its type. It is not known to have any association with significant events or people and thus is unlikely to be eligible under Criteria A or B. It is not located in an historic district.

On July 27, 1995, the interagency bridge review committee determined this bridge to be ineligible for the National Register of Historic Places.

Documentation on the property/district is presented in: Project file, Maryland Inventory

Form #? (as yet unassigned)

Prepared by: Stacie Webb, SHA

Elizabeth Hannold — December 27, 1996
Reviewer, Office of Preservation Services — Date

NR program concurrence: X yes ___ no ___ not applicable

Peter E Kurtze — 12/30/96
Reviewer, NR program — Date

Survey No. WO-488

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

X	Eastern Shore	(all Eastern Shore counties, and Cecil)
	Western Shore	(Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
	Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
	Western Maryland	(Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

	Paleo-Indian	10000-7500 B.C.
	Early Archaic	7500-6000 B.C.
	Middle Archaic	6000-4000 B.C.
	Late Archaic	4000-2000 B.C.
	Early Woodland	2000-500 B.C.
	Middle Woodland	500 B.C. - A.D. 900
	Late Woodland/Archaic	A.D. 900-1600
	Contact and Settlement	A.D. 1570-1750
	Rural Agrarian Intensification	A.D. 1680-1815
	Agricultural-Industrial Transition	A.D. 1815-1870
	Industrial/Urban Dominance	A.D. 1870-1930
X	Modern Period	A.D. 1930-Present
	Unknown Period (___ prehistoric	___ historic)

III. Prehistoric Period Themes:

	Subsistence
	Settlement
	Political
	Demographic
	Religion
	Technology
	Environmental Adaption

IV. Historic Period Themes:

	Agriculture
X	Architecture, Landscape Architecture, and Community Planning
	Economic (Commercial and Industrial)
	Government/Law
	Military
	Religion
	Social/Educational/Cultural
X	Transportation

V. Resource Type:

Category: Structure

Historic Environment: Rural

Historic Function(s) and Use(s): Transportation-vehicular

Known Design Source: State Roads Commission